

CLAIMS

1. A manipulator comprising a plurality of mutually movable arms, of which a first arm (3) is rotatably arranged around a first axis (A) and a second arm (7) is rotatably arranged around a second axis (B), cabling (12) extending along the mutually movable arms and a supporting device (8) which supports a part of the cabling extending between the first arm and the second arm, said supporting device comprising a supporting arm (9) which, rotatably arranged around a third axis (C), is arranged at the first arm, and a first attachment (13), arranged at the outer end of the supporting arm and surrounding the cabling, **characterized** in that the first attachment and the third axis are arranged on opposite sides of the longitudinal axis of the first arm, that the supporting arm exerts a resilient force in the longitudinal direction of the cabling, and that the supporting device comprises an auxiliary arm (10) with a second attachment (15) arranged at the second arm.

2. A manipulator according to claim 1, **characterized** in that the supporting arm (9) comprises an angled part which permits the cabling to be held stretched centrally over the first arm.

3. A manipulator according to claim 1 or 2, **characterized** in that the auxiliary arm (10) is arranged at the turning disc (7) of the manipulator.

4. A manipulator according to any of the preceding claims, **characterized** in that the supporting arm and the auxiliary arm support a bendable tube, in which the cabling is running.

5. A manipulator according to any of the preceding claims, **characterized** in that a spiral spring (17) is arranged around the third axis for influencing the supporting arm.

09902536 "07.11.01

6. A manipulator according to claim 5, **characterized** in that a spiral spring is housed in a container (18).

7. A method in a manipulator comprising a plurality of mutually movable arms, of which a first arm (3) is rotatably arranged around a first axis (A) and a second arm (7) is rotatably arranged around a second axis (B), cabling (12) extending along the mutually movable arms and a supporting device (8) which supports a part of the cabling extending between the first arm and the second arm, wherein the supporting device is brought to comprise a supporting arm (9) which, rotatably arranged around a third axis (C), is arranged at the first arm, and that a first attachment (13), which surrounds the cabling, is arranged at the outer end of the supporting arm, **characterized** in that the first attachment and the third axis are arranged on opposite sides of the longitudinal axis of the first arm, that the supporting arm is adapted to exert a spring force directed along the cabling, and that the supporting device is brought to comprise an auxiliary arm (10) with a second attachment (15) which is arranged at the second arm.

8. A method according to claim 7, **characterized** in that the supporting arm (9) is brought to comprise an angled part which permits the cabling to be kept stretched centrally over the first arm.

9. A method according to claim 7 or 8, **characterized** in that the auxiliary arm (10) is arranged at the turning disc (7) of the manipulator.

10. Use of a manipulator according to any of claims 1-6, or a method according to claims 7-9 during welding.

centad
Dr